Plant Press

Finding Vegetative Solutions for Conservation Problems

USDA - Natural Resources Conservation Service - Golden Meadow Plant Materials Center

Field Evaluation Plantings

The development and transfer of technology is an integral part of the Plant Materials Program. Technology development and transfer is accomplished through the use of field or off-center evaluation plantings. These plantings are used to assess the conservation potential of new or developing technology under field conditions.

Various mixtures of switchgrass, eastern gamagrass, little bluestem, Indiangrass, big bluestem, partridge pea, Illinois bundleflower, purple coneflower, black-eyed susan, and coreopsis were planted this spring to demonstrate the use of native species for wildlife habitat, buffers, filter strips and grazing operations. Sites planted this spring included Idlewild Research Station in Clinton, Dean Lee Research Station in Alexandria, Camp Beauregard in Pineville, 3 WRP sites in Natchitoches parish, 2 sites in Franklin parish, 2 sites in Bienville parish, and 1 site in Tensas parish.

The Golden Meadow PMC has also been busy with tree and shrub adaptation trials on various coastal habitats. The following 5 locations have been planted this year:

Fourchon dedicated sediment disposal site: 10 sites over 200 acres planting 12 species totaling 750 plants.

Trinity Island, 4 sites with 60 plants per site totaling 240 plants.

Grand Isle, 3 sites with 60 containerized plants per site totaling 180 plants.

LUMCON interior marsh, two sites totaling 75 containerized plants

Barataria spoil bank, one site with 60 containerized plants

The PMC also led a beach planting on **Holly Beach** April 22, for Earth Day. Earth Team volunteers planted 1,500 plants of 'Brazoria' seashore paspalum, 'Caminada' seaoats, 'Fourchon' bitter panicum, 'Gulf Coast' marshhay cordgrass and seacoast bluestem.

Since January, 5,445 containerized plants have been taken off-center for demonstration plantings.

To schedule a field evaluation planting in your area contact Scott Edwards at: **scott.edwards@la.usda.gov.**

Lawrence Clark, NRCS Deputy Chief for Science and Technology, and students from Mermentau Elementary plant marshhay cordgrass.

Vegetative Solutions

"We cannot solve the problems we have created with the same thinking that created them."

Albert Einstein

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NRCS Natural Resources Conservation Service

The Mission of the NRCS Plant Materials Program:

We develop and transfer plant materials and plant technology for the conservation of natural resources. In working with a broad range of plant species, including grasses, forbs, trees, and shrubs, the program seeks to address priority needs of field offices and land managers in both public and private sectors. Emphasis is focused on using native plants as a sustainable way to solve conservation problems and protect ecosystems.

Louisiana Natives

Local Ecotype Seed Increase Program

MOU participants include from left, Larry Allain (USGS), Don Gohmert (NRCS), Chad Theilen (CPC), Dr. Robert Hebert (MSU) and Lawrence Clark (NRCS)

NRCS State Conservationist Don Gohmert signed a Memorandum of Understanding (MOU) April 22, 2004 with McNeese State University, USGS Wetlands Research Center and Coastal Plain Conservancy. This MOU will formalize a partnership to develop a comprehensive plant materials program to collect, increase and release locally adapted ecotypes of native grasses, forbs and legumes.

There is a growing interest from public and private sectors to utilize locally adapted native plant materials for restoration and revegetation projects in Louisiana. Conservationists have experienced inconsistent results when establishing native species ranging from success to complete stand failure. The lack of commercially available cultivars that are adapted across the state is the largest contributing factor to failure.

Cultivars that are not adapted to the state exhibit signs of summer stress and are less vigorous with lower yields than local ecotypes of the same species. Commercially available sources of locally adapted plant materials have the potential to provide substantial ecological and economic benefits for Louisiana.

Native plants currently in production include: little bluestem, big bluestem, Indiangrass, rattlesnake master, cluster bushmint, black wand root, and wooly rose mallow.

At the MOU ceremony: (L-R) Larry Allain (USGS), John Pitre (NRCS), Scott Edwards (NRCS), Cinnamon Baldwin (CPC), David Daigle (CPC), Dr. Gus Stacy (MSU), Austin Arabie (CPC) and Dr. Billy Delany (MSU)

'Gulf Coast' Marshhay Cordgrass

(*Spartina patens*)

Marshhay cordgrass is a native, warm season, strongly rhizomatous, perennial grass that is an important coastal grass species. Marshhay cordgrass comprises one-fourth of the vegetative composition in Louisiana's coastal marshes. 'Gulf Coast' is a cultivar release that was initially evaluated at the Golden Meadow PMC from 1991 through 1999.

Gulf Coast marshhay cordgrass is a performance proven plant material that is needed in Louisiana's coastal restoration program. Gulf Coast has proven superior to other Louisiana and Texas ecotypes assembled and tested and to commercially available cultivars Flageo and Sharp marshhay cordgrass. It has also demonstrated early response and vigorous re-growth after 50 days of inundation from floodwaters caused by Hurricane Andrew.

Gulf Coast is recommended for conservation planting in coastal areas of the north central Gulf of Mexico basin. Gulf Coast can be successfully planted in brackish and salt marshes, marsh ridges, coastal beaches, barrier islands, and restored marsh where dedicated sediments are used. Gulf Coast has proven effective for marsh restoration, shoreline and levee stabilization, and beach and barrier island sand dune enhancement and stabilization.

Plant Solutions for Conservation Needs

We're on the Web!

plant-materials.nrcs.usda.gov